

Electronic Filing System (EFS) Data  
Electronic Patent Application Submission  
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EFS ID: 19154  
Application ID: 10065498  
Title of Invention: PEROVSKITE CATALYST SYSEM  
FOR LEAN BURN ENGINES  
First Named Inventor: Haren Gandhi  
Domestic/Foreign Application: Domestic Application  
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Filing Type: new-utility  
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Trademark Office, ou=Department of Commerce, o=U.S.  
Government, c=US  
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Deposit Account Name: Frank A. Angileri



# TRANSMITTAL FORM



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Attorney Docket  
Number:

201-  
0555

Submission Type: Utility Patent  
Filing

## PEROVSKITE CATALYST SYSEM FOR LEAN BURN ENGINES

First Named Inventor: Haren Sakaral Gandhi

### SUBMITTED BY

Name:	FRANK A. ANGILERI
Registration Number:	36,733
Electronic Signature Mark: /s/Frank A. Angileri	Date Signed: 20021024

*I certify that the use of this system is for OFFICIAL correspondence between patent applicants or their representatives and the USPTO. Fraudulent or other use besides the filing of official correspondence by authorized parties is strictly prohibited, and subject to a fine and/or imprisonment under applicable law.*

*I, the undersigned, certify that I have viewed a display of document(s) being electronically submitted to the United States Patent and Trademark Office, using either the USPTO provided style sheet or software, and that this is the document(s) I intend for initiation or further prosecution of a patent application noted in the submission. This document(s) will become part of the official electronic record at the USPTO.*

### Attached Files:

declaration	declaration1.tif
declaration	declaration2.tif
declaration	consentltr.tif
bibd-transmittal	e2010555apds.xml

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e2010555fee.xml
e2010555ids.xml
spec.xml
```

**Attached Image File(s):**

declaration1.tif  
declaration2.tif  
consentltr.tif

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Comments:  
Consent Letter attached.

## DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY

Atty. Docket No. FCHM 0106 PUS / 201-055  
First Named Inventor HAREN S. GANDHI ET AL

As a below named inventor, I hereby declare that my residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

### PEROVSKITE CATALYST SYSTEM FOR LEAN BURN ENGINES,

the specification of which:

☒ [ X ] is attached hereto; or  
☐ [ ] was filed on (MM/DD/YYYY) \_\_\_\_\_ as U.S. Application Number or PCT International Application Number \_\_\_\_\_, and was amended on (MM/DD/YYYY) \_\_\_\_\_ (if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below, and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Priority Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached? (Yes/No)

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

Application Number(s)	Filing Date (MM/DD/YYYY)	Status: Patented, Pending, Abandoned

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HAREN SAKARAL GANDHI

**FILED:            HEREWITH**

ATTORNEY DOCKET NO.: FCHM 0106 PUS / 201-0555

## CONSENT LETTER

Commissioner for Patents  
United States Patent and Trademark Office  
Washington, D.C. 20231

Sir:

The attorney or agent identified below has reviewed this application and its attachments and consents to its electronic filing.

Respectfully submitted,

HAREN SAKARAL GANDHI ET AL

By:

**SANGEETA G. SHAH**

Reg. No. 38,614

**Attorney/Agent for Applicants**

Date: October 24, 2002

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[illegible]

Stylesheet Version: 1.0

## Large Entity

The commissioner is hereby authorized to charge indicated processing and/or publication fees and credit any overpayments to:

[illegible]

### Charge Assignment Fees Required Under 37 C.F.R. Section 1.21 (h).

Authorized Name: Frank A. Angileri  
Electronic Signature Mark: /s/ Frank A. Angileri  
Date Signed: 20021024

Fee Description	Fee Code	Fee Paid
Utility Filing Fee	1001	\$ 740

### EXTRA CLAIM FEES

	Fee Code	Fee	Extra Claims	Fee Paid
Total Claims: 20	1202	\$ 18	0	\$ 0
Independent Claims: 3	1201	\$ 84	0	\$ 0



$$\begin{aligned} \frac{\partial \mathcal{L}}{\partial \mathbf{w}_1} &= \frac{\partial}{\partial \mathbf{w}_1} \left( \frac{1}{2} \mathbf{w}_1^T \mathbf{w}_2 + \frac{1}{2} \mathbf{w}_2^T \mathbf{w}_1 \right) = \mathbf{w}_2 + \mathbf{w}_1 \\ \frac{\partial \mathcal{L}}{\partial \mathbf{w}_2} &= \frac{\partial}{\partial \mathbf{w}_2} \left( \frac{1}{2} \mathbf{w}_1^T \mathbf{w}_2 + \frac{1}{2} \mathbf{w}_2^T \mathbf{w}_1 \right) = \mathbf{w}_1 + \mathbf{w}_2 \end{aligned}$$

Subtotal For Extra Claims Fees: \$ 0